



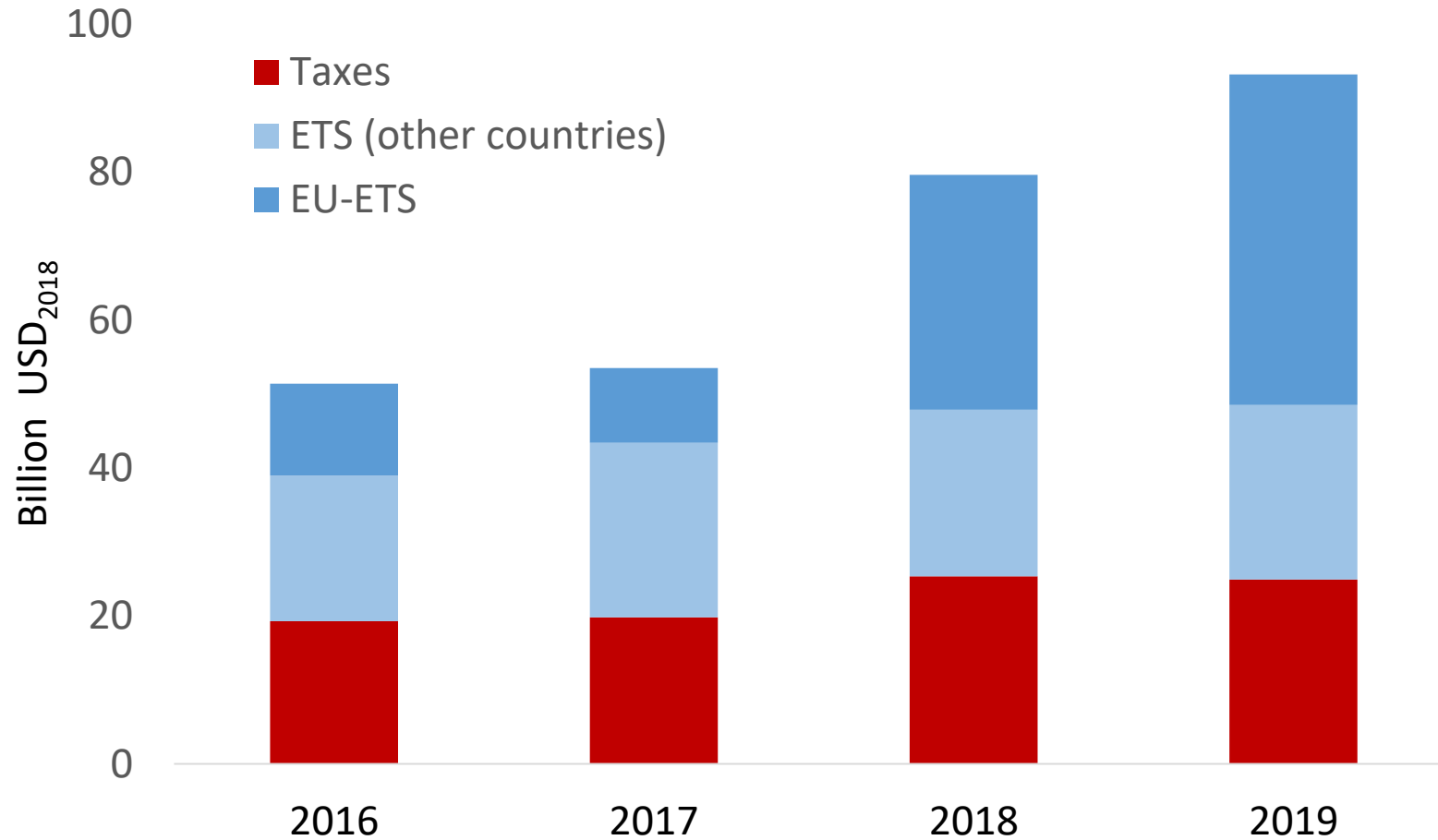
POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

Making carbon pricing work for citizens

Prof. Dr. Ottmar Edenhofer

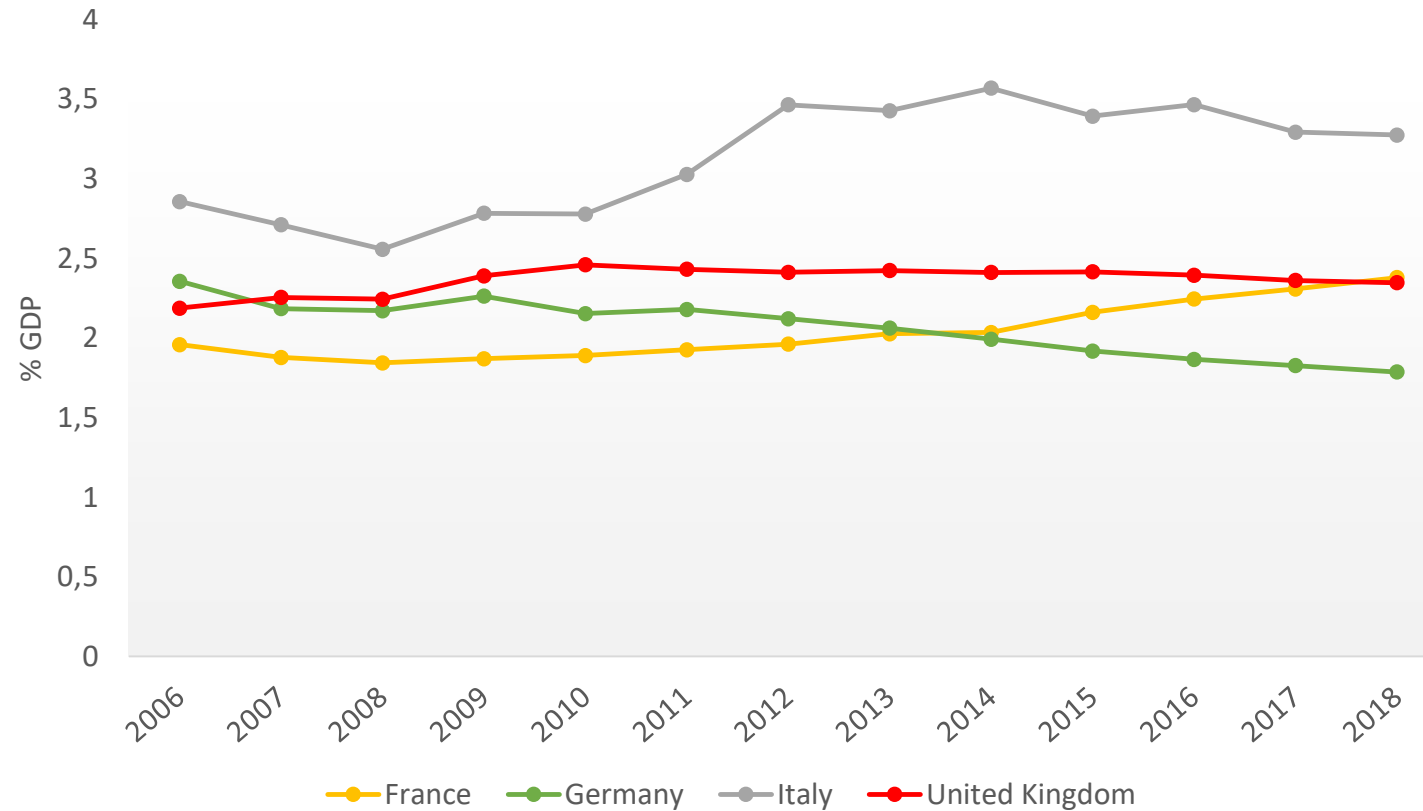
Finance Ministers EuroGroup
Brussels, 17 February 2020

Global Revenues from Carbon Pricing



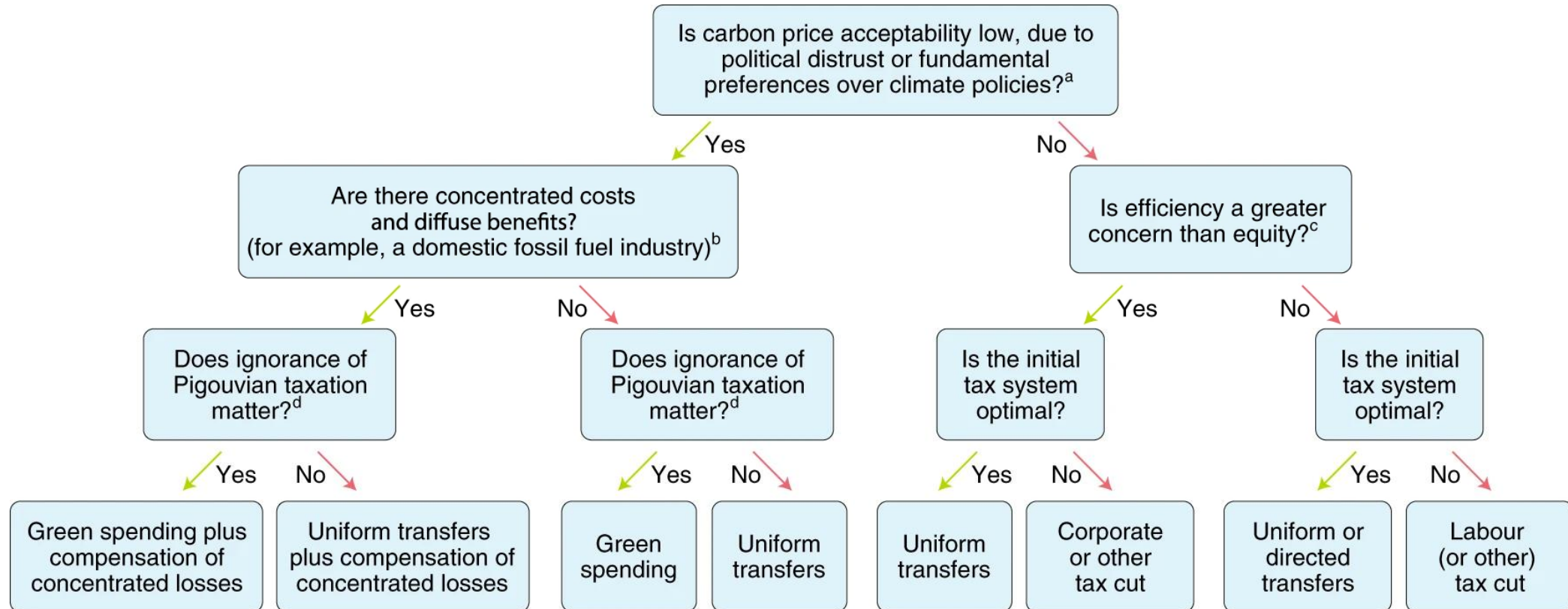
Source: Adapted from Edenhofer et al. (2020), based on Data from World Bank Carbon Pricing Dashboard, <https://carbonpricingdashboard.worldbank.org>

Environmental Taxes as % of GDP - Total

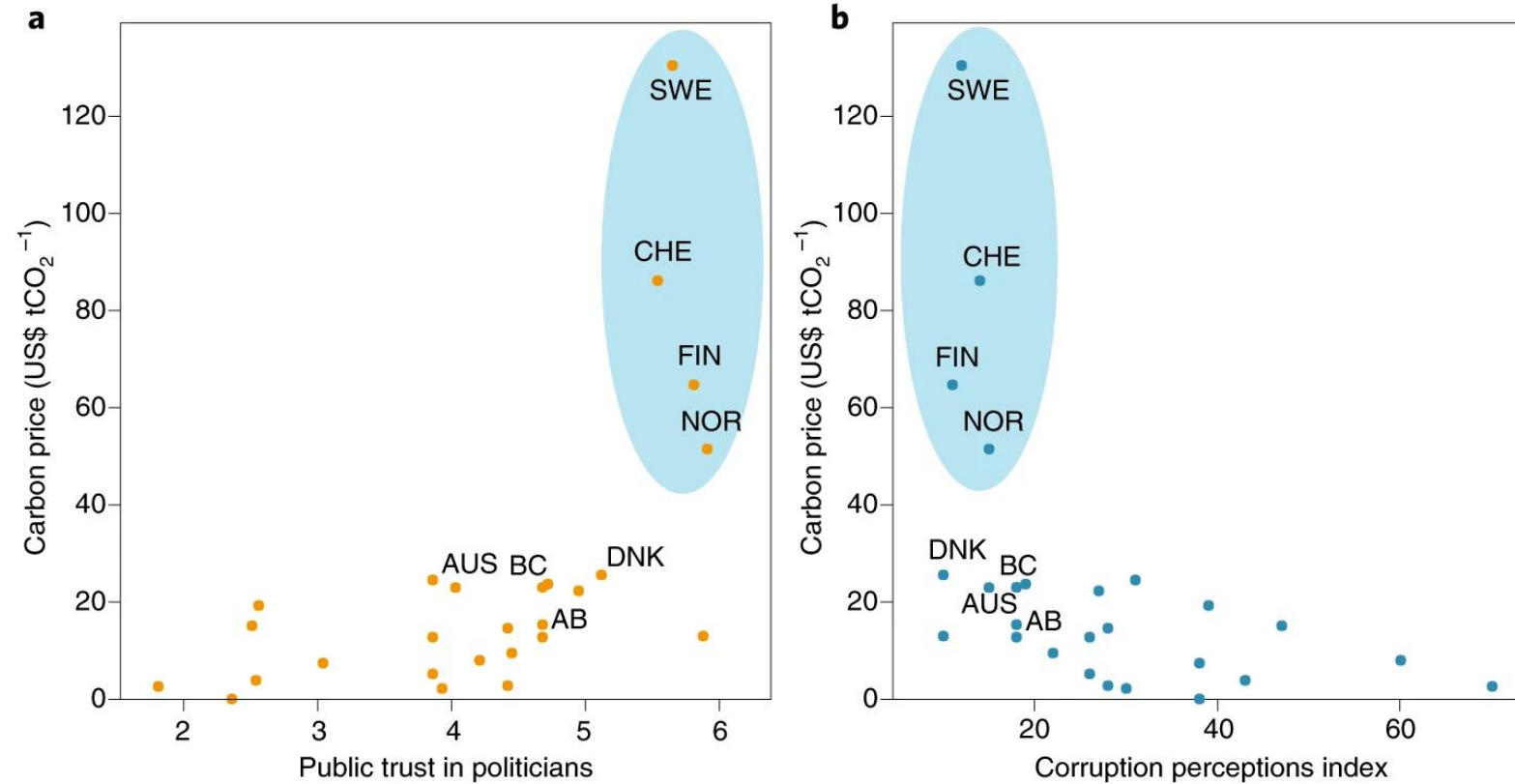


Source: Eurostat (2020)

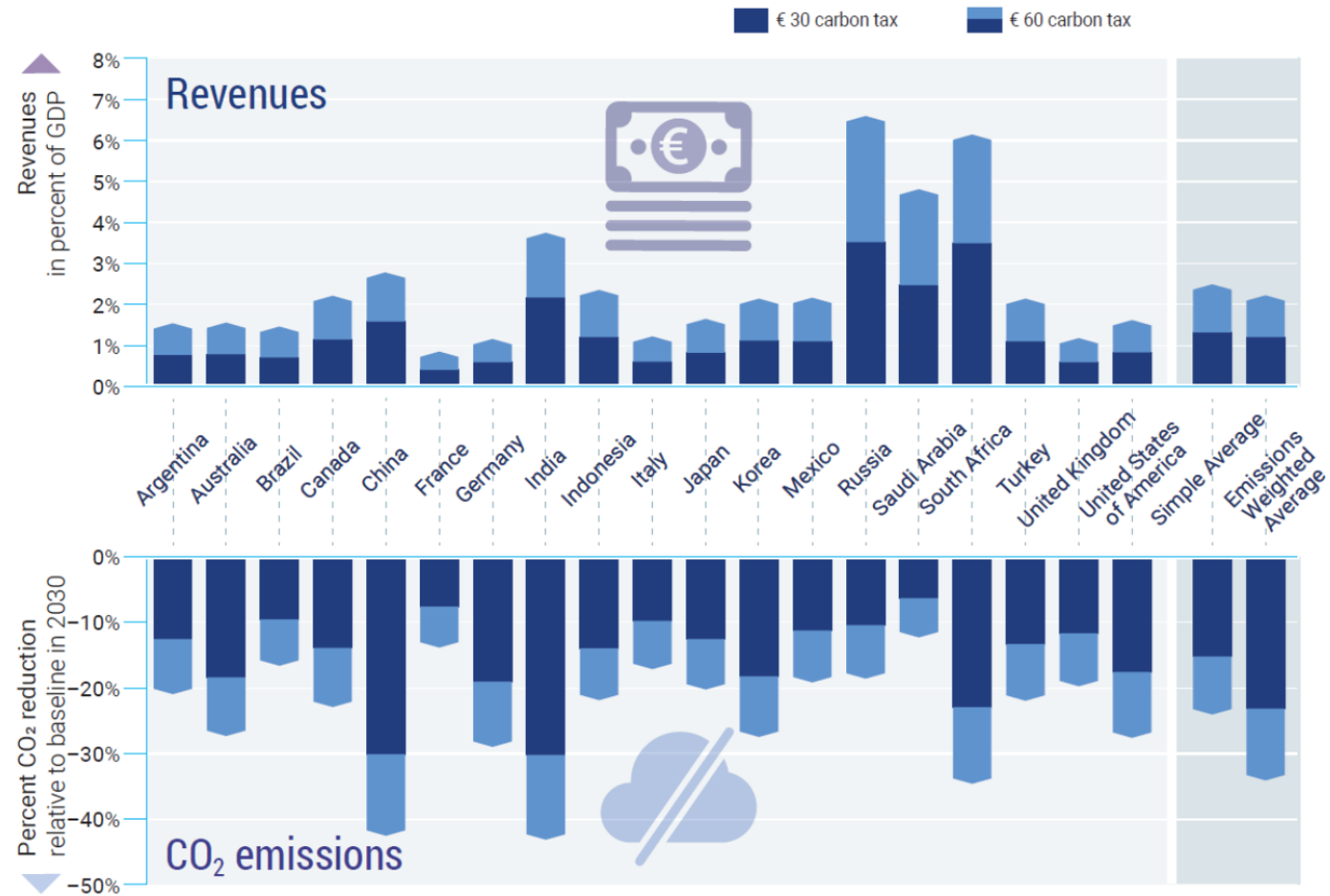
Carbon Pricing and the Fiscal System



Commitment and Credibility



Carbon Pricing Works



Source: UNEP GAP Report, Parry et al. (2018)

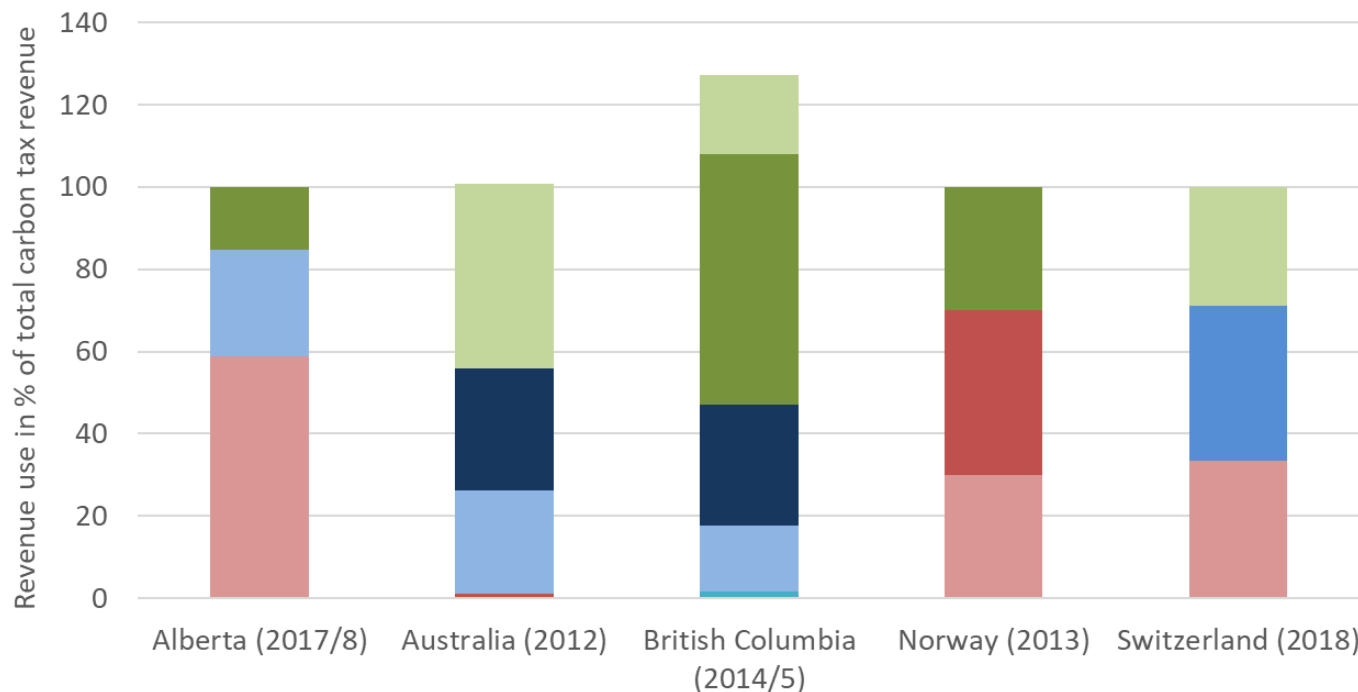
How to spend the revenues?

Table 1 | Recycling mechanisms ranked according to efficiency, equity and acceptability

Recycling mechanism	Efficiency	Equity	Acceptability
Labour tax (initial system non-optimal)	+	+	0
Labour tax (initial system optimal)	0	0	0
Capital/corporate tax (initial system non-optimal)	+	–	0
Capital/corporate tax (initial system optimal)	0	–	0
Directed transfers	0	+	+
Uniform transfers (initial system non-optimal)	0	+	+
Uniform transfers (initials system optimal)	+	+	+

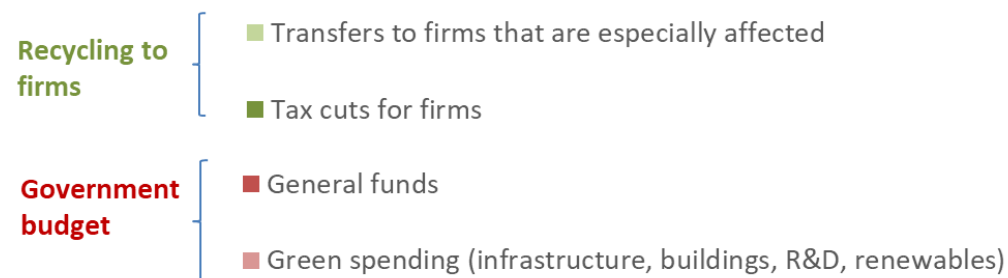
Equity and efficiency are determinants of acceptability, but the evaluation of acceptability focuses on the other factors that determine it. We use the definition of optimal as given in the section on public economics. Plus (+) and minus (–) signs indicate positive and negative evaluations, respectively, whereas 0 indicates a neutral evaluation.

Different countries follow different revenue schemes



Recycling of revenues to:

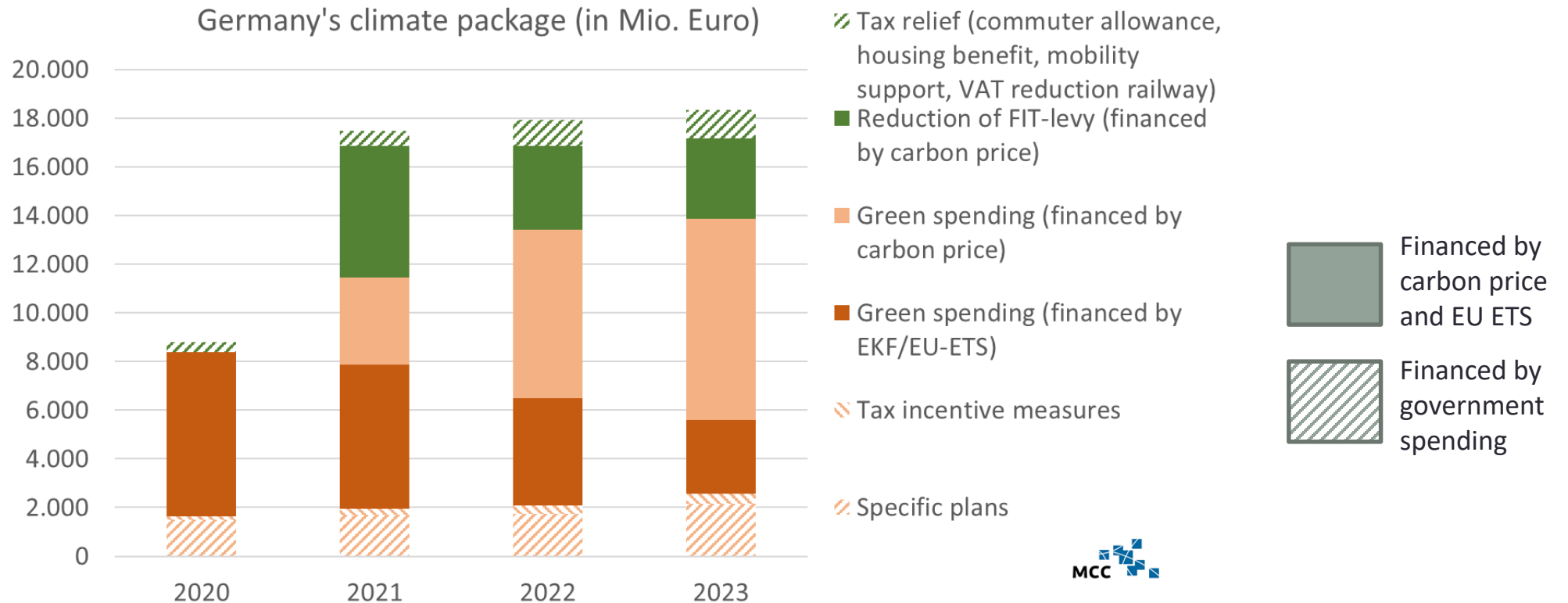
- Firms
- Households
- Green spending / Gov budget



Recycling to households

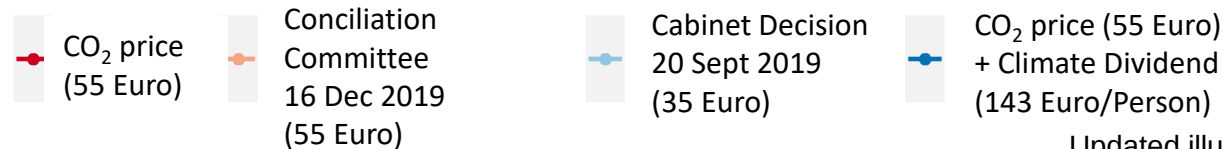
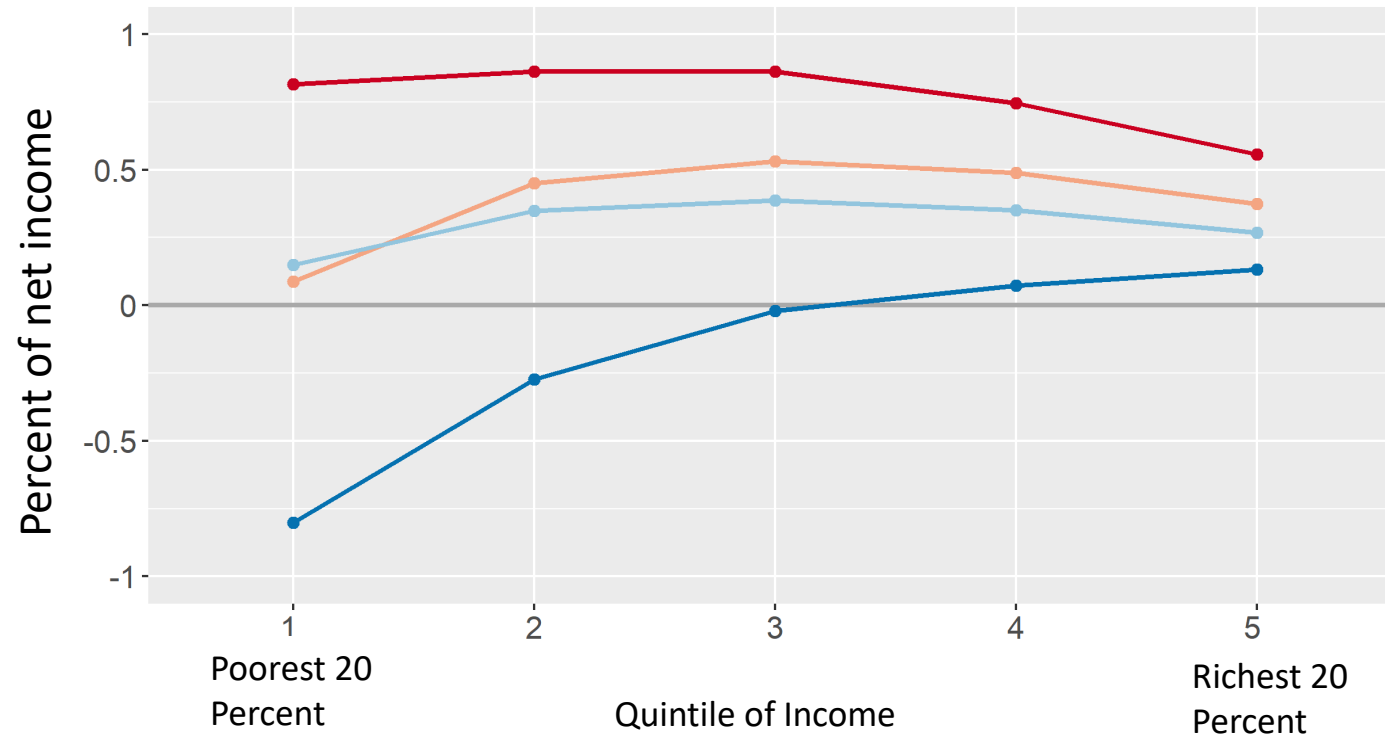
- Progressive tax cuts for households
- Uniform lump-sum transfers to households
- Directed transfers to especially affected households
- Other tax cuts for households

Germany's climate package: focus on green spending measures



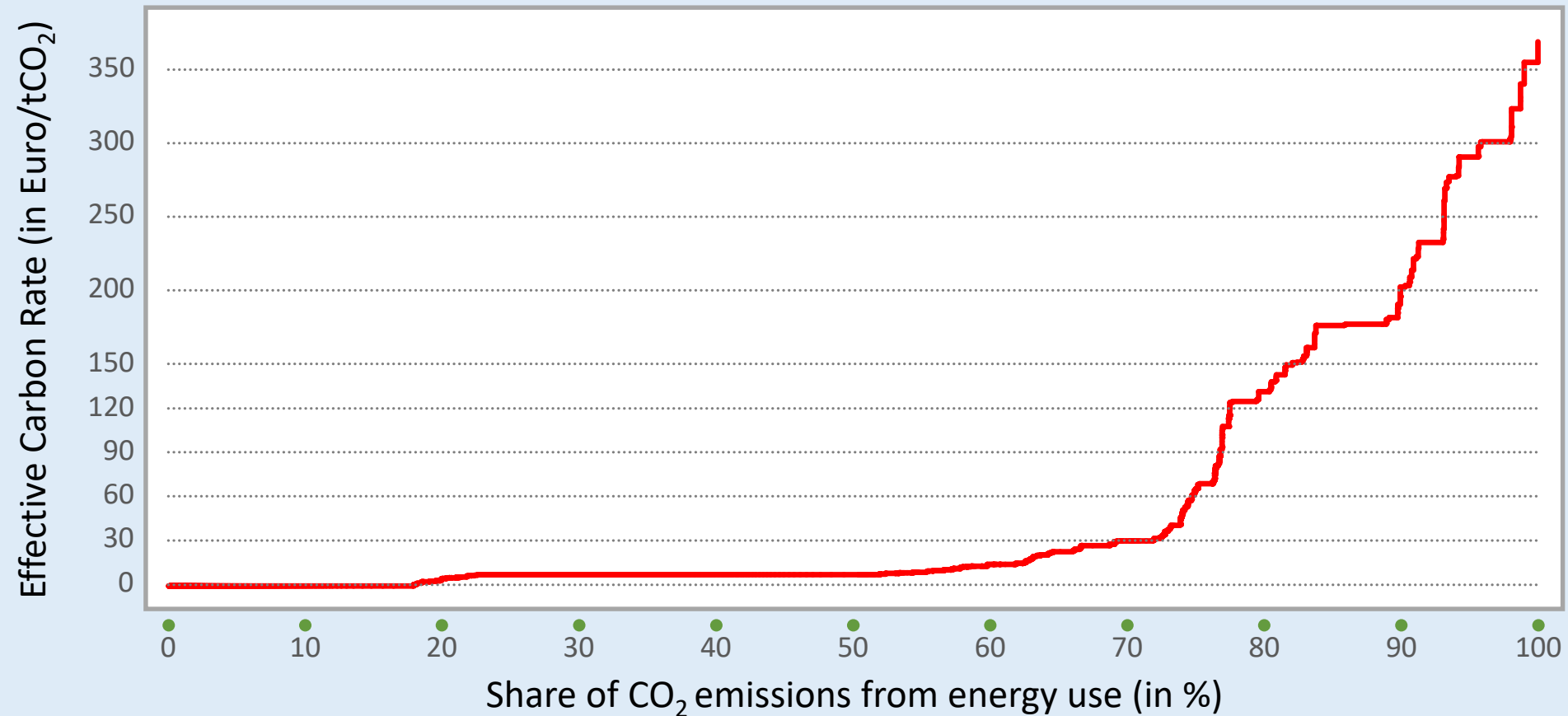
Distributional effect of Germany's carbon price

Burden in 2025 (carbon price of 55€)



Updated illustration based on Edenhofer et al. (2019)

Effective Carbon Rates in EU-22



Effective Carbon Rates refer to excise taxes, carbon taxes or allowance prices;
Data based on OECD (2018) for EU countries in OECD

Sequencing towards a European Carbon Pricing

